

SPU/SDoT Record Drawing Requirements

Items in the following checklists apply only when deviations to the original design drawings occur (JOC, GCCM or advertised). CAD standards and support files can be found on the web at:

http://www.seattle.gov/util/Engineering/CAD_Resources/

General

- ☐ Record drawings shall be done in AutoCAD or AutoCAD Civil 3D and must conform to the standards as defined in the CAD Manual.
- ☐ Record drawing file names shall add **RD-** to the front of the Work Authorization Number.
- ☐ Record drawings will show only deviations to the original design without any references to RFIs, FCRs, payment items, DCs, etc. Record drawings shall be accurate, clean, clear and easily readable. In congested areas, additional blow-up details may be required for readability.
- ☐ Record drawing layers have the “CR-” discipline designator (see Section 5: Layers in the CAD Manual) and use colors 32-38 (see Section 8: Plotting/Printing in the CAD Manual).
- ☐ Geo-referenced utility linework shall be drawn and classified in accordance with Section 6 of the CAD Manual to ensure smooth export of linework into GIS.
- ☐ Items not built shall be put on the CR-NBLT layer (lines can be broken) and crossed out with the CR-ANNO layer (not deleted).
- ☐ Annotation shall have the text style name is set to "COS-Record" with the “font name” set to RomanS.shx, the “paper text height” set to 0.00, the “width factor” set to 1.00 and the “oblique angle” set to 20 (see Section 7: Annotation in the CAD Manual). The plotted text height shall be 1/8”.
- ☐ All record drawing sheets shall have the “RECORD DRAWING” stamp block affixed (see Section 2: Support Files in the CAD Manual).

Paving Plans

- ☐ Station and offset (or station and pavement width) from monument line or construction baseline to:
 - ☐ all beginnings and ends of curb and/or “match existing” points.
 - ☐ all curb PC’s, PT’s, PRC’s, angle points, and changes of curb height. If wheel-chair ramps are involved project top of curb elevations through ramp area.
 - ☐ delta angle on all curb returns, and radius on all curb returns and reverse curves (curve information may be shown in a table or detail if desired).
- ☐ Elevations at quarter points of curb returns (curve information may be shown in a table or detail if desired).
- ☐ Radius on all reverse curves (curve information may be shown in a table or detail if desired).
- ☐ Elevations at top corners of each proposed ADA ramp, if applicable.
- ☐ Show outlines of castings/openings in paved area.

Paving Profiles

- ☐ Show elevations at all grade breaks.
- ☐ Show elevations at all “match existing” points.
- ☐ Provide a description of any vertical curves (required for grade changes greater than 1%). The description must include:
 - ☐ VPI station and elevation.
 - ☐ Length of vertical curve (min along streets is 75’).
 - ☐ High or low point station and elevation, if applicable.

Paving Cross Sections

- ☐ Dimension from centerline to saw cut, flow line (if other than base of curb), face of curb, sidewalk and sidewalk width, and right-of-way line.
- ☐ Show height of curb or dimensions of thickened edge of asphalt
- ☐ Show cross slope on all paved surfaces

Utility Plans

- ☐ Rim and invert elevations for all manholes, catch basins, inlets, pipes, etc.
- ☐ Station and offset from monument line or construction baseline to:
 - ☐ all features (maintenance holes, cleanouts, catch basins, inlets, fittings, joints, hydrants, valves, etc.).
 - ☐ all horizontal break points and all connection points.
- ☐ Size and material of each pipe.
- ☐ Size and type of each feature (maintenance holes, cleanouts, catch basins, inlets, fittings, joints, hydrants, valves, etc.).

Utility Profiles

- ☐ Pipe profiles are required for all sewer, storm drain, and water mains. Pipe profiles must include:
 - ☐ Identification of each structure.
 - ☐ Elevation at rim of each structure.
 - ☐ Elevations at each invert, connection, and/or grade break on each pipe.
 - ☐ Gravity pipes must be labeled with size, material, length and slope of each pipe run.
- ☐ Radius and delta angle of curved pipes, if applicable.

Submittals

- ☐ AutoCAD .DWG files, the Sheet Set Manager .DST file, image files, Excel spreadsheets and LandXML files (see Section 9: Electronic Transmittals in the CAD Manual) created according to the SPU/SDoT Inter-departmental CAD drafting standards.
- ☐ Plotted 22"x34" hard copy drawing using Record_Drawings.ctb (see Section 8: Plotting/Printing in the CAD Manual) composed of color pigment-based ink on bond paper with RECORD DRAWING stamp block affixed (see Section 2: Support Files in the CAD Manual).
- ☐ PDF of plan set (for best quality use "DWG To PDF.pc3" – see Section 8: Plotting/Printing in the CAD Manual).